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### Journal Item

#### How to cite:

van Duppen, Jan and Spierings, Bas (2013). Retracing trajectories: the embodied experience of cycling, urban sensescapes and the commute between 'neighbourhood' and 'city' in Utrecht, NL. *Journal of Transport Geography*, 30 pp. 234–243.

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Version: Not Set

Link(s) to article on publisher's website:

<http://dx.doi.org/doi:10.1016/j.jtrangeo.2013.02.006>

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# Retracing Trajectories: The embodied experience of cycling, urban sensescapes and the commute between 'neighbourhood' and 'city' in Utrecht, NL

Jan van Duppen<sup>a</sup>, Bas Spierings<sup>b</sup>

<sup>a</sup> Department of Geography, The Open University, Walton Hall, MK7 6AA, Milton Keynes, United Kingdom. E-mail: [jan.van.duppen@open.ac.uk](mailto:jan.van.duppen@open.ac.uk)

<sup>b</sup> Urban and Regional Research Centre Utrecht, Utrecht University, PO Box 80115, 3508 TC Utrecht, The Netherlands. E-mail: [B.Spierings@uu.nl](mailto:B.Spierings@uu.nl)

## Abstract

This paper looks into the experience of "passing through different territories of the city" (Sennett, 2006, p.3). Despite their importance for making sense of the city as a whole, these experiences are often not acknowledged in urban planning. This paper compares the everyday, embodied experiences of commuter cyclists with the planners' perspective on Utrecht. 'On the ground' data was collected via ride alongs with 15 inhabitants of the Leidsche Rijn neighbourhood. Our analysis reveals cycling trajectories composed of diverse sensescapes. It paints a much more complex picture of intra-urban divisions and connections than the planners' perspective of the 'new' Leidsche Rijn neighbourhood separated from the 'old' city by major infrastructure lines.

## Keywords

Embodied experience, cycling, trajectories, ride-alongs, sensescapes

## 1. Introduction

In recent years there has been much debate on how to make cities more sustainable. In an attempt to create "*urban environments which are safer, more sociable and less environmentally damaging*" (Tight et. al, 2011, p. 1580), new policy visions are drawn up and implemented, often with a focus on encouraging walking and cycling practices. Yet, according to Jones and Burwood (2011), 'simplistic' labels of environmental responsibility and a healthy lifestyle 'poorly' represent the intense and personal experience of commuter cycling. To actually encourage cycling practices, a better understanding is needed of what it means to cycle between home and work on a daily basis (Pooley et. al, 2011).

Cycling practices have been widely studied but academic endeavours have tended to focus on analysing modal choice or finding the best infrastructures to promote cycling. This focus on "*push and pull factors at points A and B [means that] the line 'between' A and B*" (Spinney, 2009, p. 818) remains mostly unexplored. However, the 'new mobilities paradigm' (Shelly & Urry, 2006) has introduced a cross-disciplinary approach, which takes seriously the complex interplay between movement, its representation and the embodied experience (Cresswell, 2010). This has recently resulted in an increasing number of ethnographic accounts of cycling as embodied practice (see, for instance, Brown, 2010; Jones, 2005; Jones & Burwood, 2011; Jones, 2012; Spinney, 2006; Spinney, 2007; Wood, 2010).

This paper enriches these accounts by studying urban sensescapes, because the "*in situ corporeal experience from day-to-day*" (Degen & Rose, 2012, p. 3) remains mostly neglected in studies on cycling. Previous ethnographic accounts focused mainly on the senses of the cycling body, whereas we attempt to gain insights into the cycled city. We will analyse how cyclists are situated in cities and explore their embodied experience of urban territories, including divisions and connections between different territories (Spierings, 2013). Following Sennett, we want to describe "... *the experience of passing through different territories of the city, both because that act of passage is how we know the city as a whole, and also because planners and architects have such difficulties designing the experience of passage from place to place*" (Sennett, 2006, p.

3). We attempt to reveal sensescapes and their composition along entire trajectories between home and work, and thereby increase our understanding of multiple divisions and connections – physical and mental – along trajectories and, as such, also within cities. Our ethnographic methods, gps-traced and video documented ride-alongs, play an essential role in this, as they form a novel means to study sensescapes. It is an attempt to combine and develop fieldwork approaches as mobile video ethnography (Spinney, 2011), and mobile audio diary (Jones, 2012).

In order to, compare cyclists' experiences with planners' perspectives, we will draw on a case study of commuter cyclists living in the so-called 'Leidsche Rijn' neighbourhood on the outskirts of Utrecht, a Dutch middle-sized city (about 300.000 inhabitants). The development of this neighbourhood started in 1997 and is planned to be finished in 2025 (about 80.000 inhabitants). Viewed from above, the 'new' neighbourhood and the 'old' city appear divided by both the Amsterdam-Rijnkanaal (a 100 meter width canal) and the A2 (a major motorway connecting Utrecht and Amsterdam). City planners see both improving physical connections between neighbourhood and city (Van der Hoeven, 2012) and increasing bicycle use as real challenges towards becoming a sustainable city. This paper compares the planner's perspective with everyday, embodied experiences of commuter cyclists 'on the ground'. This reveals a more complex picture of intra-urban divisions and connections than one of a neighbourhood separated from the city and its centre by major infrastructure lines.

The conceptual framework for our analysis will be developed next, followed by a discussion of research methods, selected participants and the rationale of the case study in its local planning context. The fifth section gives an ethnographic account of embodied experiences of commuter cycling. The paper concludes by discussing the multitude of divisions and connections encountered resulting in some critical reflections on current policies in Utrecht to improve connections between 'neighbourhood' and 'city'.

## **2. The embodied experience of commuter cycling**

This paper analyses the embodied experiences of commuter cyclists passing through different territories of the city. In so doing, we explore different spaces and their rhythms as sensed through the body, with special attention for intentions and memories. Furthermore, we study tactics to negotiate space and synchronise rhythms. Ways in which commuters both sense urban spaces and apply cycling tactics constitute what has been defined as urban 'sensescapes' – to denote the relationship and interaction between the sensory body and the urban environment (Rodaway, 1994; Degen, 2002).

Commuter cycling is an everyday practice in which experience is mediated through the senses. Our sensory body allows us to see, hear, smell, taste, and feel the city and its features (Jones & Burwood, 2011; Middleton, 2010; Wunderlich, 2008). These features may be "human", such as the social life of the city, and "nonhuman", such as the urban built environment. Both can be observed and reflected on when riding a bike. The frames and tires of the bicycle also allow feeling the texture of the road. As such, the bicycle enables an 'extended touch' of the environment (Rodaway, 1994 in Spinney, 2007). However, senses do not operate individually but continuously affect one another. The embodied experience of the city is sensorially 'multimodal' (Degen et. al., 2006) and all the senses come together in sensescapes. The interactive relationship between sensory body and urban environment develops and changes when we move through the city, resulting in different and dynamic sensescapes along the way (Degen, 2010).

When cycling, the interactive relationship between body and environment can be quite intense. This is especially the case when high speed is involved, resulting in feelings of 'euphoria' for some (Jones, 2012) but also making space seem more 'fluid', requiring quicker responses to changing circumstances (Virilio, 2001 in Brown, 2010). The latter is even more the case when traffic rules and lights are ignored and people intersect and interweave on the street, creating 'organised chaos' (Pelzer, 2012). Organised, chaotic, or both, interactions between pedestrians, cars, cyclists, traffic lights, pavements, car noise, exhaust fumes, and the like, constitute what Seamon (1980) calls 'place-ballets'. These ballets contain multiple rhythms, or 'polyrhythmia', which are sensed through the body (Edensor & Holloway, 2008). According to Lefebvre (2004), rhythms may have harmonious interrelations (or 'eurhythmia') and disruptive interrelations (or 'arrhythmia'). For cyclists, rhythms may be disruptive when their flow through the city and cadence of the body are interrupted by other traffic. This is often followed by attempts to synchronize, and

achieve harmony, through what Jensen (2010) describes as ‘negotiations in motion’. These entail a wide variety of tactics, including gestures, gazes, body movements, but also exploring alternative trajectories. The tactics are put in practice to enact what cyclists consider their ‘right to space’ (Brown, 2010) and are developed to position themselves within the on-going field of interacting rhythms. Cyclists may apply similar ‘shrewd ways of moving around’ as the car-drivers analysed by Katz (2000, p. 36 in Thrift, 2004): “... *choosing streets that one knows carry little traffic, sneakily cutting across corner gas stations to beat traffic lights, discreetly using another car as a ‘screen’ in order to merge onto a highway...*”. These tactical appropriations of streets (De Certeau, 1984) could be found in the case of cyclists making detours and using informal shortcuts or even illegal paths.

Commuting, including commuter cycling, is often undertaken on a daily basis and out of necessity (Gehl, 1987). It, therefore, tends to be undertaken in a repetitive mode and as efficient as possible. Repetition often results in refinement of tactics, which according to Bissel “*might gradually curtail the degree of encumbrance experienced by the body*” (Bissel, 2009, p. 188). This could make cyclists feel more secure on the bike but the repetitive rhythm and distinct purpose of getting to home and work could also make people less sensitive to their direct surroundings (Degen & Rose, 2012), which is often noticed when the daily routine is disrupted due to unexpected events and a rerouted cycling path, for instance. Moreover, clear distinctions between commuting as ‘purposive’ – as necessary activity with a specific destination –, ‘discursive’ – as more spontaneous activity with conscious experience of surroundings – and ‘conceptual’ – as a way of exploring and getting to know the city – (Wunderlich, 2008) do not reflect everyday practices. There is more complexity to be found in daily commutes than only purposive intentions and the related aim to find efficient trajectories. Commutes often also have discursive characteristics and may be undertaken for conceptual reasons as well. A detour through a quiet and green environment, for instance, may very well be chosen with the purpose of avoiding chaotic situations and saving time. At the same time, it may be taken for reasons of “*more conscious contemplation of the surroundings, rather than reacting to immediate challenges and threats on the road*” (Jones, 2012) and even for getting to know the city better.

Memories collected during previous commutes – including the embodied tactics of manoeuvring at street junctions and witnessed accidents – are also important for understanding present embodied experiences (Degen & Rose, 2012). As Pile put it: “*the networks of streets both produce and contain memories. At one and the same time, one can travel in time and move through space. Each new angle, each new experience on the streets, could produce another memory – in a flash, the past, the present and the future are combined and recombined*” (Pile, 2002 in Pinder, 2001, p. 11). In the context of recollecting memories, Lefebvre (2004) talks about ‘psychological rhythms’ which are also experienced through the body. The embodied and on-going process of comparing and referring to previous experiences of the same and other urban spaces (Spierings, 2009), takes place along the entire cycling trajectory through the city.

### 3. Research methods and participants

To grasp the embodied experiences of cycling and to explore urban sensescales, in-depth interviews were conducted with 15 inhabitants of the Leidsche Rijn neighbourhood while ‘riding along’ during regular commuting times. The ride-along is a translation of the ethnographic research method *go-along* in which: “... *fieldworkers accompany individual informants on their ‘natural’ outings, and – through asking questions, listening and observing – actively explore their subjects’ stream of experiences and practices as they move through, and interact with, their physical and social environment*” (Kusenbach, 2003, p. 463). In recent years, several academics have applied the same method for cycling research (see, for instance, Brown, 2010; Pooley et. al, 2011; Spinney, 2006; Spinney, 2007; Wood, 2010). The ride-alongs were tape-recorded, GPS-tracked and video-documented with a small sport camera installed on the handlebar. The videos were used as field notes, enabling a sense of ‘feeling there’ (Spinney, 2011) when analysing the fieldwork material. To further assist the analysis, notes were made regarding the interview and its circumstances, such as weather conditions and participants’ characteristics. The transcribed in-depth interviews were analysed through an ‘open coding’ process (Crang & Cook, 2007; Corbin & Strauss, 2008) to identify and categorize themes in the transcripts – with the assistance of Maxqda software as tool for qualitative data analysis.



Participants were recruited at a local online discussion group, during fieldwork, and via 'snowballing' contacts of people working for institutions collaborating in this research project. This led to a group of 8 female and 7 male participants commuting between home and work on a daily basis. Their ages range from 29 to 47 years old, have middle-class incomes and as such represent the most common group living in the neighbourhood. Participants were employed in a wide range of sectors, including: a graphic designer, a social worker, a H&R manager at a bank and an optician's assistant. Their names have been substituted for fictional ones, but their age displayed. They were recruited in the Leidsche Rijn areas closest to the city centre, because of feasible cycling times (between 20 and 30 minutes). In most cases, participants defined themselves as ordinary commuters rather than 'cyclists'. In contrast too many other western countries, cycling as a mode of transport is 'common' and 'self-evident' in the Netherlands. It is perceived as a 'quasi-natural' phenomenon (Stoffers, 2012, p. 92), therefore notions of cycling citizenship (Aldred, 2010) did not come the fore during the interviews. When asked about their motivations for cycling, participants argued that the bicycle offers them flexibility, time-efficiency, and an everyday exercise.

We would like to reflect shortly on the fieldwork and data-analysis. First of all, for safety reasons, ride-alongs may not always be possible as a research method (Pooley, et. al., 2011; Spinney, 2011). In the Netherlands, however, it is common practice to cycle side by side and have a conversation. Our ethnographic account was, thus, facilitated by Dutch cycling culture and the high quality of infrastructure. We believe that this dialogue in motion has enriched our findings, and distinguishes the analysis from previous cycling research. Second, all ride-alongs were conducted, transcribed and analysed in Dutch. For this paper citations have been translated, during which subtle meanings might have been lost. Third, we experienced that in comparison with 'normal' interviews transcribing ride-alongs takes more effort, as the participants tend to speak less coherently. The transcripts contain short sentences and dialogues are interrupted by the participant's directional instructions. This fragmented and embodied language reflects the fleeting experience of cycling.

#### 4. Case study and local context

In this paper we analyse cyclists' embodied experiences in relation to Utrecht's urban structure and its municipal policies, with a specific focus on the neighbourhood 'Leidsche Rijn'. The latter is the biggest Dutch VINEX-neighbourhood and is the result of a significant national policy change. During the nineties, extensions of cities were not longer planned as *new towns* situated far from the urban core. Instead 'VINEX-neighbourhoods' were developed on locations close to the city with an explicit emphasis on decreasing auto-mobility and increasing the use of public transport and encouraging walking and cycling (RuimtelijkPlanbureau, 2005). Leidsche Rijn was planned on the basis of the 'compact city' concept, which *"assumes that keeping distances within urban regions short will result in environmental benefits through reduced travel(time) and more effective land use."* (Van der Hoeven, 2012, p. 29) and therefore contains an advanced cycle-lane-network. Utrecht's urban planners aimed to realise a 'close physical relationship' between 'the mother city' and Leidsche Rijn (Van der Hoeven, 2012, p. 23). Seen from above, Leidsche Rijn seems separated from the city and its centre by two major infrastructure lines; the canal 'Amsterdam-Rijnkanaal' and the A2 motorway. Planners conceive both the motorway and canal as important barriers in the city; and have therefore prioritised tackling these in urban policies. In order to integrate the motorway in the new neighbourhood a two kilometre long tunnel that encapsulates the A2 was constructed in 2012. Both a commercial centre and public park are planned around and on the tunnelled motorway (Bekkering, 2011). In addition, a new bridge has been built over the canal, to facilitate the increased traffic flows (realised in 2008).

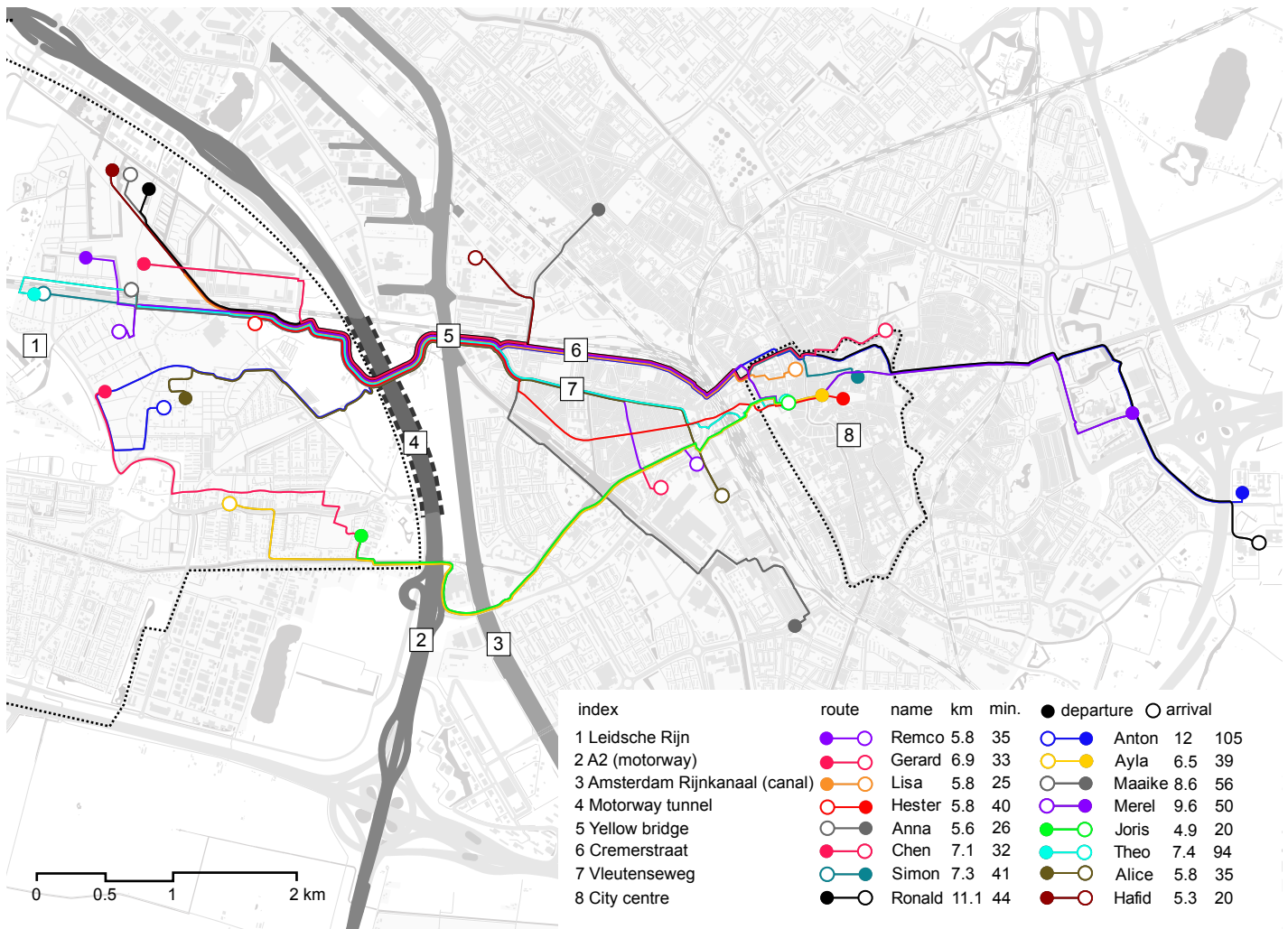
Smoothing connections between the new 'neighbourhood' and old 'city' also feeds the municipalities' ambition to become *the* cycling city in the Netherlands. To win this triennial competition the number of cycling trips between 7.5 and 15km needs to be increased, which includes the commuting trips from and towards Leidsche Rijn (Municipality of Utrecht, 2011). In comparison to similar sized European cities, the quality of Utrecht's cycling infrastructure is high, with its extensive network of segregated red cycle lanes spread out in the city and region. However, within the city centre the infrastructure cannot handle the increased numbers of cyclists. There are serious issues of cycling congestion and dangerous traffic situations during

rush hours, a topic recently addressed at the 'More bicycles, more space!' symposium in Utrecht (Platform31, 2013).

To summarise, it remains to be seen whether physical interventions as the encapsulated A2 and the redesigned bridge over the canal bring the 'compact city' closer. The municipality of Utrecht faces serious challenges to fulfil their ambitions to become *the* Dutch capital of cycling *and* integrate the 'new' city part with the 'old' city. In order to achieve this, an important step would be to gain understanding of embodied experiences of commuter cyclists.

## 5. Commuter cycling and urban sensescapes

Map 1 shows GPS-tracks of the daily trajectories taken by the participants. It reveals a rather dispersed pattern in the Leidsche Rijn neighbourhood and the same goes for routes taken after the cyclists have crossed the bridges in the northern or the southern part of the city. The map also reveals the trajectories' directions (from home to work, or vice versa), as these differ among participants. This paragraph will explore urban sensescapes as experienced by commuter cyclists. Sensescapes are personal constructions and thus differ among participants, this analysis shows both these differences *and* the common characteristics and tendencies. The exploration starts with 'the home' and ends with 'the workplace' in order to follow the daily rhythms of the participants.



**Map 1. Daily cycling trajectories**

[map design Hein van Duppen, map data © OpenStreetMap]

### 5.1 Home and neighbourhood



**Video still 1. Arriving home**

Participants left their homes between 8:00 and 9:00 and usually returned in the late afternoon between 17:00 and 18:00. Leaving home is about making sandwiches for the kids, taking the bicycle from the shed, and starting up the day while cycling through the neighbourhood. The rhythm of the commute is very much determined and the experience of the commute highly influenced by the regular organisation of working hours. Cycle paths and the roads were therefore extremely busy during the interviews whereas about an hour later the traffic was less intense and sometimes streets were almost deserted.

For several participants the neighbourhood sensescape is one of combining tasks; collecting children and/or grocery shopping along the way. Several parents brought their children to Kindergarten or primary school. They favoured the bicycle as a mode of transport because it enabled them to be more flexible, which has been identified by Heinen et al. as one of the reasons to cycle (Heinen et al., 2010). Alice (36), a mother of two children, explained that her daughter sometimes has difficulties with saying goodbye at the Kindergarten, which delays her travelling time. Yet, when she is cycling it does not cause any trouble because she can easily stay a bit longer. Whereas, travelling by public transport, train schedules would result in her starting half an hour later at the office. In this case, the bicycle provides the commuter with the necessary time-space to manoeuvre between the rhythms of the child and work. However, for other inhabitants of Leidsche Rijn it might be the case that the car provides this necessary 'flexibility' (Heinen et al., 2010).

On their way through the neighbourhood participants greeted passers by, talked about their neighbours and expressed their attachment to the place they live in. Notions of home differed among participants, and strong feelings of belonging and reaching home were expressed at different moments along the cycling trajectory. Anna (39), for example, already experienced a feeling of 'reaching home' when cycling upon the yellow bridge, which is situated in between the city centre and the neighbourhood (see section 5.3). Whereas, for Hester (31), arriving home entailed checking her mailbox and watering the plants in her garden. For Merel (35), passing the little canal surrounding her housing block was the moment of arriving home (video still 1). When turning the corner into her street she first looks to see whether the kids are playing outside. If so, she joins them.

## 5.2 Twilight zone



**Video still 2. Landscape of disorder and change**

Then we arrive in the 'twilight zone' as Anton (41) typified it. Participants talked about a landscape of disorder and continuously changing cycle paths (video still 2) situated in-between the Leidsche Rijn neighbourhood and the rest of Utrecht. It is a zone of uncertainty, multiple wastelands and openness. Several participants found this part of the journey quite boring, as Chen (35) putted it: *"there is nothing to do or see"*. Hafid (37) elaborated by saying: *"And this, I experience as much colder and duller as the part before, that part just now was quite cosy. The trees are fully-grown, and being here, from this point to the bridge is to me the duller part."*

Many participants complained about the detour they have to take since the most direct cycle path along the railway track has been removed several years ago. Moreover, the detours for cars are well signposted and the detour for cyclists is not. This made some cyclists feel marginalized in the planning process. They were also curious about future developments, which, according to them, were not communicated clearly by the city government. Some cyclists also felt uneasy in the evening due to malfunctioning street lights although it did not deter them from cycling. Yet some participants's experiences of dullness and the detour were contrasted by others' much more enthusiastic comments; for instance, a curiosity to see *"what has changed this time"* (Simon, 30).

Cycling through the green in-flux, cyclists remembered seeing rabbits, hares, pheasants and lambs, which they regarded as enriching the landscape. Anna (39), for example, regretted that the lambs were gone. Others mentioned that they were used to seeing more rabbits, especially in the morning or at dawn, but with the neighbourhood development they disappeared over the years – illustrating what Pile (2002) means with streets producing and containing memories. In the twilight zone, cyclists appreciated the wild flowers growing along the roads, symbolising the area's indeterminacy. In addition, they valued a meadow with an old small farming house; a trace of Leidsche Rijn's agricultural history.

As a way of avoiding the long slow curves, which can be time-consuming especially when speeding downhill, some cyclists take an informal path. It has been 'cycled' into one of the slopes that leads cyclists towards the bridge. They cross a field of grass to make a shortcut, and experienced a certain joy in using and creating this 'desire line' (Van der Burg, 2011). The repeated practice results in sandy paths upon the grass, which could be seen as a self-organised infrastructure, and resonates with De Certeau's (1984) idea of tactical appropriations of urban surroundings.

When cycling towards the city centre of Utrecht, being in the twilight zone also implies approaching the bridge. That means getting up the 'mountain' (Chen, 35), which actually is a



slowly rising slope that reaches the bridge. It does demand for extra muscle power, which makes cyclists suddenly aware of their body. They are 'tested' by the landscape, as the slope reduces their speed and the muscle power makes some sweat. For Ronald (46) this slope was the 'killing factor' when he started doing his commute of 40 minutes back and forth: "... *at the end of the week, my legs turned sour, and I felt it when climbing the stairs at home*". When Chen (35) had a 'difficult week at work', she would sigh and think: "*I don't want this anymore...*". However, having crossed and now speeding down the bridge, this feeling has disappeared. She then enjoys the 'distraction' of the city. These personal accounts of facing the hill along the trajectory exemplify how context-specific embodied experience and its representations of it can be. Although Spinney's description of race-cyclists climbing Mont-Ventoux reveals what it means to go through an intense kinaesthetic experience (2006), the extra muscle power needed for this not-so-mountainous bridge is still experientially significant for Utrecht cyclists as they are used to a flat landscape.

### 5.3 Yellow bridge and coffee smell



**Video still 3. Speeding down**

Cyclists regarded the bridge in the northern part of the city as a landmark in their trajectory. Some referred to it as being next to the 'Douwe Egberts' coffee factory, but most coined it after its colour: 'yellow bridge'. The bridge brought about strong positive responses, cyclists found it 'beautiful', 'magnificent' and 'really cool'. Compared to the former bridge, it also felt more 'secure' (Anna, 39) with its well-designed sides giving a 'spacious' feeling (Anton, 41) because of the curved fence edging the bridge. When cycling on the bridge, people watched the boats passing below them and just gazed over the water for a moment. For Remco (35), the most 'exciting' part of the journey was when speeding down the bridge (video still 3), profiting from the slope and inhaling the strong coffee smell at the same time. Everyday, a strong smell of coffee is produced by the Douwe Egberts coffee factory, adjacent to the canal. The smell creates a fluid sensescape, depending on the wind, which cyclists clearly enjoyed – even those who never drink coffee! The smell was often associated with approaching and being 'home' or with starting the day with coffee at work, and for some it is an indicator of the wind direction. When on her return journey Maaïke (29) already smelled coffee in the city centre, she knew that she would face a headwind when cycling up the bridge.

#### 5.4 Quiet shortcut and official lane



**Video still 4a. Quiet shortcut**



**Video still 4b. Official cycle lane**

Having passed the bridge, cyclists either chose to take the quiet shortcut 'Cremersstraat' (video still 4a) or the official cycle lane 'Vleutenseweg' (video still 4b) which is very busy during rush hours. Participants strongly preferred the quiet shortcut, which sheds light on a conflict between the conceived space of urban planners and cyclists' spatial practices. In fact, they mostly opted for the Cremersstraat because it is green and quiet and therefore more pleasant for cycling. Participants appreciated the lack of car traffic and noise, emphasising that there is a 'cosy' (Chen, 35) feeling when cycling through a neighbourhood and not being on an 'open road' – i.e. the official cycle lane. Moreover, they do not have to stop for traffic lights as there are none. This is in contrast to the Vleutenseweg, which has several disrupting the cycling rhythm. Another advantage of the Cremersstraat is that it is well connected to the city centre whereas the Vleutenseweg includes a rather complex and time-consuming junction. Some cyclists found the

quiet shortcut themselves and others heard about it from friends and colleagues. Surprisingly, cyclists did not complain about the bumpiness of the Cremerstraat due to many irregularities of the street pavement and the many speed ramps. Despite – what Rodaway (1994) calls – the ‘extended touch’ of bumpiness and ramps, they seem to prefer the quiet street over the very busy, and also smooth surface of, the Vleutenseweg.

The Cremerstraat as shortcut is favoured because it allows cyclists to get in the flow and let thoughts meander at the same time. Tendencies to keep on cycling were found among all the trajectories. Cyclists predominantly do not like to pause: *“it’s a small moment of happiness when I don’t have to stop for the traffic light”* (Hester, 31). They seek continuous movement. Participants also differentiated their trajectories into territories where you can get ‘in the flow’ (Remco, 35) and locations of disruption and waiting. When in the ‘flow’ one finds himself lost in the moment (Csikszentmihalyi, 1975), Spinney has shown how a cyclist in London sought for this *“bodily thrill”*, in doing so he playfully *“carved a route out of both pedestrian and vehicle spaces”* (Spinney, 2011, p. 171). Notwithstanding, or maybe due to, the high quality of Dutch cycling infrastructure we found similar illegal tactics to get into and remain in the flow. Firstly, routes were selected in order to avoid traffic lights or unnecessary detours. Disregarding traffic laws (Pelzer, 2012), cyclists made use of pavements and cycled in the opposite directions on roads or cycle paths. Participants were aware of their tactics being illegal as they described them as ‘cheating’ (Remco, 35), ‘secretly’ (Maaïke, 29), and ‘a small gesture of civil disobedience’ (Anna, 39). Secondly, most participants admitted running the red light often. Lisa (43) commented on this common practice: *“red is the new green for cyclists”*. Cyclists stated that repeating the journey helps them to gather knowledge about which junctions are suitable for running the red light. This practice is rather benign and low-level in comparison to the speedy, risk full riding styles of London’s couriers (Fincham, 2007). Although, a majority of the participants seemed to pay more attention to the traffic flow than to traffic light signals, Chen (35) explained to refrain from this practice. She had adopted a more ‘secure and defensive’ riding style, after experiencing a major incident as a child. ‘Getting in the flow’ also refers to cyclists adjusting their pace and speed to the other cyclists. Especially during rush hour, one had to synchronise with the speed of a huge amount of other cyclists. According to Remco (35), talking about a junction at the Vleutenseweg, this ‘river’ of cyclists (Jensen, 2010), even forced him to follow the stream running the red light because stopping would result in other cyclists bumping into his back.

### 5.5 Stressful moments and city gates

When approaching the city centre, three main junctions form ‘gates’ to the city, these demanded for higher concentration and awareness and were often experienced as rather stressful and chaotic (video still 5). Cyclists in these situations are ‘hypersensitive to their surroundings’ and have to ‘manage a great complexity’ (Wood, 2010, p. 9). Lisa (43) on such a city gate: *“here it is always a hassle, loads of cyclists, and look, they all use the sidewalk or run the red light and there are children, and here you always have to be careful. We will have to turn left. So, I always start to cycle on the left side and signal with my arm. I have seen many people crashing into each other here. It is quite a strange part of the city. One can just cycle from all directions and everyone does it, which makes it a complex and cluttered situation”*. She speaks about the “Paardenveld” junction whereas others made similar comments about “Catherijnebaan” and “Westplein”. All three junctions deal with the largest streams of cyclist in the Netherlands but are unable to do so. An important reason for this is insufficient spaces designated for cyclist waiting for the traffic light. This produces a long chain of waiting cyclists blocking other cyclists going in other directions.

Due to the rhythms of the working day these crowded situations occur, having a direct effect on the embodied experience of the commute. For some these negotiations for space caused stress and irritations, as for example Merel (35) expressed: *“This is quite a difficult part of the journey, because it’s kind of a small crowded cycle path. Thus, I slow down here and I think ‘Shall I overtake? Does it fit or not?’ ... and this is also the part where people (both cyclists and pedestrians) just get on the cycle path without looking at the others. Then, I think: ‘O gosh, help!’*. Cyclists have developed different tactics to deal with these moments of intense negotiating. Depending on her mood Merel (35) chooses whether she takes the more crowded street in which she has to ‘manoeuvre through the cars’ or to make a detour through a quieter street. In other



words, Merel (35) changes her trajectory to avoid crowdedness, whereas Hester (31) repositions herself on the road to handle the 'crisis' at the 'Kanaalstraat': *"Cars come from all directions and they only mind themselves. Here, I always cycle in the middle of the road because they just step out of their cars without looking at the passing traffic. Before you know it, you'll get a door in your face"*. Hester (31), adopts a specific 'riding style' (Jones, 2012) to ensure safety by making herself more visible to the traffic and keep a distance from parked cars.

The process of negotiation is performed in motion and encompasses many body gestures such as turning the head to look and show that one is taking a curve. Or instead of completely stretching the arm, just lifting the finger of the handlebars to indicate directions. Or, lifting the feet from the pedals which signals one is about to stop and will soon rest his feet on the pavement curb. We also observed more assertive and aggressive gestures: bodies communicating power and determination to move on other without making room for others. Although Jensen has revealed different negotiation tactics, these subtle body movements as a way of communicating among cyclists are not touched upon in his article (Jensen, 2010). The described negotiation process produces a 'place-ballet' (Seamon, 1980; Jensen, 2010), involving a constant and interactive play – between cyclists, scooters, car and bus drivers, and pedestrians – of adjusting directions, stopping and peeping in front. It is all about looking and manoeuvring.



**Video still 5. Stressful and chaotic city gates**

### 5.6 The workplace

When waiting at the traffic light to cross the last major road before reaching her workplace, Lisa (43) looked at her watch: *"not that I have to be exactly in time but I just always have a look ..."*. For her, crossing the road marks the beginning of the workplace, including its near surroundings. While the workplace as sensescape starts for Alice (36) when she gets her office in sight: *"now we approach the sky scrapers (video still 6) and when that happens I always feel 'I'm there'"*. Many participants spoke about switching mentally between home and work during the journey. They often related a specific part of the trajectory with being occupied with 'what do I need to do at work today' (Alice, 36) or with going into 'evening mode' (Simon, 30). Cycling helped them to digest the day and after about 15 minutes of physical activity they 'cleared their mind' (Remco, 35). Others have pointed out this 'space to think' and to 'plan the day', but related to walking (Pooley et al., 2011, p. 1605). Participants argued that quietness and being in motion helps them to relax, think and handle the stress of everyday life; which was for some participants a reason to cycle to work. Anna (39) added that when she is recalling the happenings of the day she pays less attention to her surroundings during the first part of her return journey: *"... the first part I cycle mostly on the autopilot. I'm just digesting the day. When I'm here (in the neighborhood) my*



*mind is cleared already. And then, I start looking around again ...”* (Anna, 39). As Jones rightly argues, ‘thinking’ and ‘imaginative play’ are one of the few non-cycling acts one is able to engage in while cycling (Jones, 2012, p. 652). We would like to add that for this ‘mental’ journey less intense sensescapes are a crucial condition for a process of thinking and daydreaming. Chaotic junctions and loud surroundings may demand for too much attention and thereby disturb ones mental digestion.



**Video still 6. The big towers**

## **6. Conclusions**

Our analysis of embodied cycling experiences in Utrecht pinpoints several important facets of daily trajectories in between home and work. Firstly, the trajectories involve continuous negotiations ‘in motion’ with other traffic. For this, cyclists have developed tactics of manoeuvring, positioning oneself safely on the road and adjusting to the pace and rhythm of others. In so doing, higher levels of concentration, and sometimes even stress, are experienced in chaotic situations. Several tactics also reflect a disregard for traffic rules. Cyclists have developed skills on when and where to run the red lights and take informal or even illegal paths. However, this very much depends on whether they have children in their company or not and memories of traffic accidents also have implications for the adopted riding style. Secondly, commuter cyclists seek continuous rhythm and efficient movement when assembling trajectories but chosen routes also involve conscious experience of urban surroundings and even exploration of unknown urban territories. Cyclists want to get ‘in the flow’ and aim to achieve efficiency through avoiding traffic lights and taking shortcuts. However, shortcuts also provide for more conscious experience of the green and quiet environment – although the same environment may be preferred to digest the day on autopilot – and are found via both word-of-mouth and self-discovery. And thirdly, using the bike for commuting allows for some flexibility in combining the rhythm of the working schedule and of other daily tasks, in particular for bringing children to Kindergarten and/or primary school in the morning and collecting them in the evening.

Retracing participants’ trajectories via ride-alongs has produced insights into the composition of diverse urban sensescapes – ways in which environments are sensed and tactics applied through the body. Cycling between home and work involves preferences and intentions as well as biographies and memories, all of which are highly personal. At the same time, however, commuter cyclists seem to share the embodied experiences of the following sensescapes along their trajectories: the familiar ‘neighbourhood’ and the ‘home’, the disorderly and continuously changing ‘twilight zone’, the ‘yellow bridge’ in combination with ‘coffee smell’, the cosy and ‘quiet

shortcut' as well the more busy 'official lane', the stressful and chaotic 'gates of the city' and the 'workplace'.

Previous studies on the embodied experience of (commuter) cycling already revealed some sensescapes (Jones & Burwood, 2011; Jones, 2012; Spinney, 2006; Spinney, 2007) but have never analysed their composition along entire trajectories between home and work. Our analysis of cycling trajectories, with a focus on sensescapes, enriches the debate on commuter cycling with an essential understanding of multiple divisions and connections – physical and mental – along trajectories and, as such, also within cities. In fact, our participants consider the yellow bridge as the 'beginning' of the city – and thus where the neighbourhood 'ends'. They very much also experience dividing distinctions between the quiet and relaxed neighbourhood, on the one hand, and the chaotic and stressful gates close to the city centre, on the other hand. The same holds for distinctions between the busy and official cycle lane and the cosy and quiet shortcut, between the familiar neighbourhood and the disorderly and continuously changing twilight zone as well as between the dull and dead twilight zone and the lively street life of the city. At the same time, the smell of coffee seems to connect urban spaces mentally, which are apart physically. For commuter cyclists, smelling coffee anywhere along the trajectory generates clear connecting associations with being at home or starting up at the workplace. On route to the workplace, they also start thinking about what they will have to do there. On the way back home, cyclists go in the 'evening mode' and already think about being at home and in the neighbourhood. Cycling up the yellow bridge may heighten the anticipation of getting there as well.

This brings us to the argument that the commuting trajectory is divided and connected in multiple ways, transcending the planners' priority to overcome infrastructure lines as main dividers of 'neighbourhood' and 'city' in Utrecht. This is not to say that the constructed bridge (over the canal) and the tunnel (encapsulating the motorway) cannot smoothen connections and create a more 'compact city'. However, such an approach seems to forget about already existing connections and to marginalize other divisions of importance. Any attempt to foster urban integration, encourage commuter cycling and create more sustainable cities needs to pay more attention to what commuter cyclists experience when "passing through different territories of the city" (Sennett, 2006, p.3). Urban sensescapes have proved to be a helpful analytical tool for providing insights into the 'act of passage' and the multitude of embodied experiences. This includes a more nuanced understanding of intra-urban divisions and connections, which are simultaneously experienced and socially constructed when commuter cyclists assemble their trajectories through the city.

### **Acknowledgements**

This article is based on a collaborative research project by Aorta (Centre for Architecture Utrecht), Utrecht University, the Treaty of Utrecht Foundation, and Casco (Office for Art, Design and Theory). We would like to thank the Doen Foundation, the Netherlands Architecture Fund and KF Heinfonds for financing the collaborative project and all respondents for participating in the fieldwork. Moreover, we would like to thank the anonymous reviewers and Peter Wood for providing constructive comments on earlier drafts of this paper and Hein van Duppen for the map design.

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